Molecular Foundry goes "Beyond Green"

First Place award from Sustainable Building Industry Council

LBNL's newest building, the Molecular Foundry, which has already been recognized for its energy-efficient and sustainable design by its LEED (Leadership in Energy and Environmental Design) "gold" rating, has now added the 2007 SBIC (Sustainable Buildings Industry Council) 1st place "Beyond Green Award" for high performance buildings to its display case. The award ceremony was held on January 16, 2008 at the National Building Museum in Washington D.C. in conjunction with a U.S. Department of Energy sponsored lecture series.

The SBIC was founded by a group of major building trade associations in 1980 as the Passive Solar Industries Council. It is committed to integrating high-performance design and construction methods with sustainable design and construction practices. These include energy efficiency, renewable technologies, daylighting, healthy indoor environments, sustainable building materials and products, and resource conservation. The Council works with the allied fields of architecture, engineering, building systems and materials, product manufacturing, and energy analysis to develop new methods of "whole building" design.

The Molecular Foundry was designed from the start with energy efficiency and sustainable design in mind. The entire team – lab management, working scientists, operations staff, maintenance personnel, EH&S professionals, consultants, and architects met in a series of design "charettes" to establish sustainability goals and to perform a life cycle cost analysis to identify the most suitable energy use reduction approaches. A "right-sizing" goal was set to establish utility load requirements; as a result, Foundry's energy performance exceeds state and federal standards by 25 to 35 percent. In addition, the facility produces 85% fewer greenhouse-gas emissions than a conventional facility. Finally, as a result of the right-sizing of the mechanical systems, all of this was achieved at no net cost compared to typical practice.

The Molecular Foundry at Lawrence Berkeley National Laboratory is a User Facility charged with providing support to research in Nanoscience underway in academic, government and industrial laboratories around the world. The Foundry provides users with instruments, techniques and collaborators to enhance their studies of the synthesis, characterization and theory of nanoscale materials.

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